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(54) Title: LATE TRANSITION METAL CATALYSTS FOR OLEFIN POLYMERIZATION AND OLIGOMERIZATION

(57) Abstract: This invention relates to a transition metal compound represented by the formula LMX wherein M is a Group 3 to 11 metal L is a bulky bidentate or tridentate neutral ligand that is bonded to M by two or three heteroatoms and at least one heteroatom is nitrogen; X is a substituted or unsubstituted catecholate ligand provided that the substituted catecholate ligand does not contain a 1,2-diketone functionality.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 03/22356

A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07F C08F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	ABAKUMOV, G. A. ET AL: "Bis(1,4-di-tert-butyl-1,4-diazabutadiene) copper(I) (3,6-di-tert-butyl-o- benzosemiquinono)(3,6-di-tert-butylcatecho lato)cuprate(II)!. The molecular structure and intramolecular electron transfer" RUSSIAN CHEMICAL BULLETIN (TRANSLATION OF IZVESTIYA AKADEMII NAUK, SERIYA Khimicheskaya) (2001), 50(11), 2193-2199, 2001, XP002228902 the whole document ---	1
A	WO 00 010945 A (E.I.DU PONT DE NEMOURS AND COMPANY) 2 March 2000 (2000-03-02) cited in the application the whole document ---	1-26 -/-

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Patent family members are listed in annex.

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X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KANNAN S ET AL: "Dinuclear diimine palladium(II) and platinum(II) hydroxo and amido complexes: synthesis and X-ray crystal structures" POLYHEDRON, PERGAMON PRESS, OXFORD, GB, vol. 19, 2000, pages 155-163, XP002221653 ISSN: 0277-5387 the whole document -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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